

## Late Ordovician trilobites from the Xiazhen Formation in Zhuzhai, Jiangxi Province, China

Dong-Chan Lee

Acta Palaeontologica Polonica 58 (4), 2013: 855-882 doi: http://dx.doi.org/10.4202/app.2010.0036

Trilobites from mudstone of the Upper Ordovician Xiazhen Formation of South China are described. The reef-associated, unique fauna comprises 25 species, 14 genera, and ten families. Five new species are named: *Remopleurides xiazhenensis* sp. nov., *Hibbertia aodiensis* sp. nov., *Vietnamia yushanensis* sp. nov., *Ceraurinus zhuzhaiensis* sp. nov., and *Pliomerina tashanensis* sp. nov. The paucity of trilobites in reef-associated carbonates is interpreted that the trilobites diversified after the reef system decimated. Compared to the Late Ordovician trilobite faunas in other areas of South China, the Xiazhen mudstone fauna is unique in that the phacopids including *Vietnamia*, *Ceraurinus*, and *Pliomerina* account for 75% of the specimens collected. The occurrence of the same trilobite assemblage at different sampling localities along the dip direction of the formation suggests that the outcrops may be overlapped due to structural movement. The Xiazhen trilobite fauna is unique among the Late Ordovician fauna in that it is predominated by phacopids and associated with reef.

Key words: Trilobita, Ordovician, Xiazhen Formation, Zhuzhai, Jiangxi Province, China.

Dong-Chan Lee [dclee@chungbuk.ac.kr], Department of Earth Science Education, Chungbuk National University, 52, Naesudong-ro, Heungdeok-gu, Cheongju, South Korea.

This is an open-access article distributed under the terms of the Creative Commons Attribution License (for details please see <u>creativecommons.org</u>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.